

ABSTRACT

Method and apparatus for transfer of signals from multiple antennas down to baseband over a common radio frequency (RF) chain. Antenna selection having greater flexibility and applicability to both uplink and downlink is obtained by giving priority to the antenna receiving a better/best quality signal. Measurements are taken by at least a channel estimator during each time slot to determine the weighting to be given to the antenna with the better/best quality signal. Techniques and apparatus are provided to take measurements over a range of intervals from time slots to single symbols, for example, to select the best signal. The techniques described herein may be used individually, and in some cases are combined to receive additional benefits in efficiency. For example, one or more of recent and/or current channel estimation, history, optimization may be employed, in addition to channel estimation, to determine signal quality.